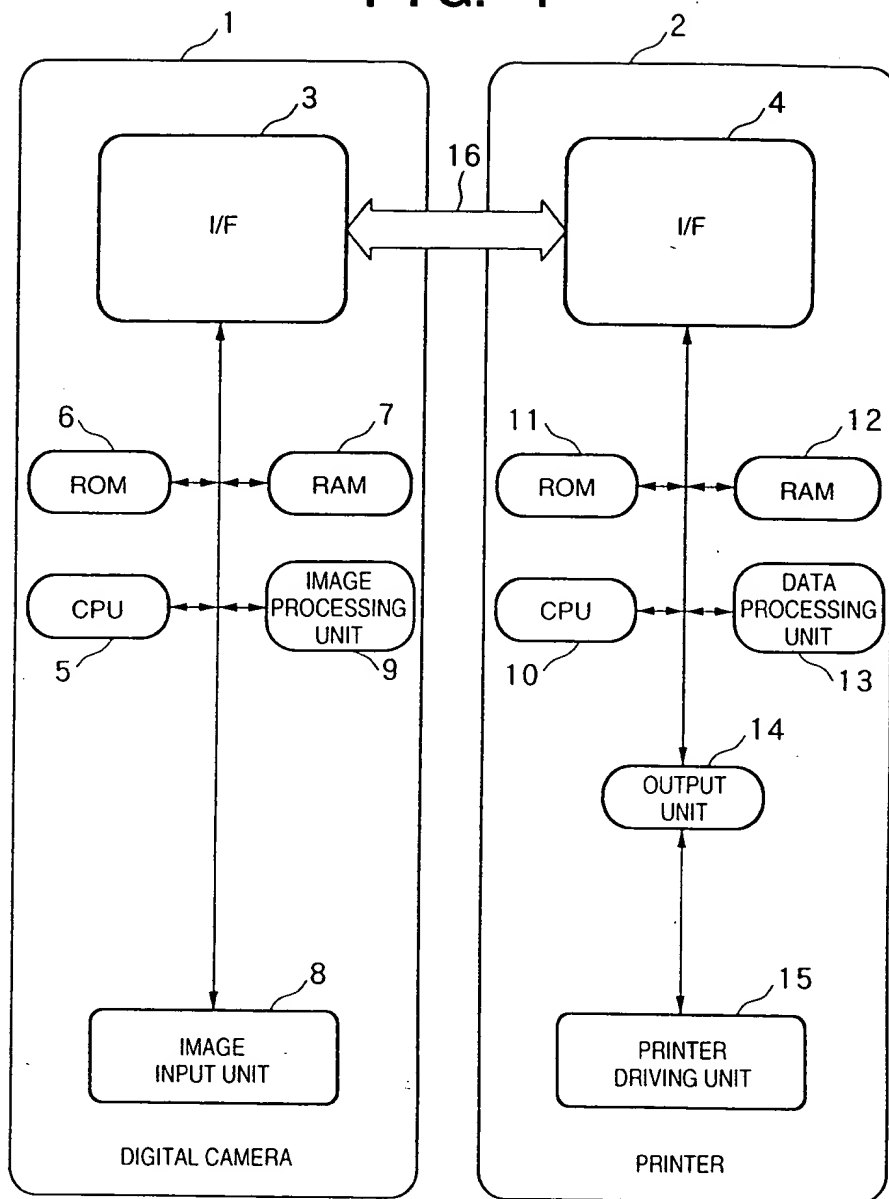
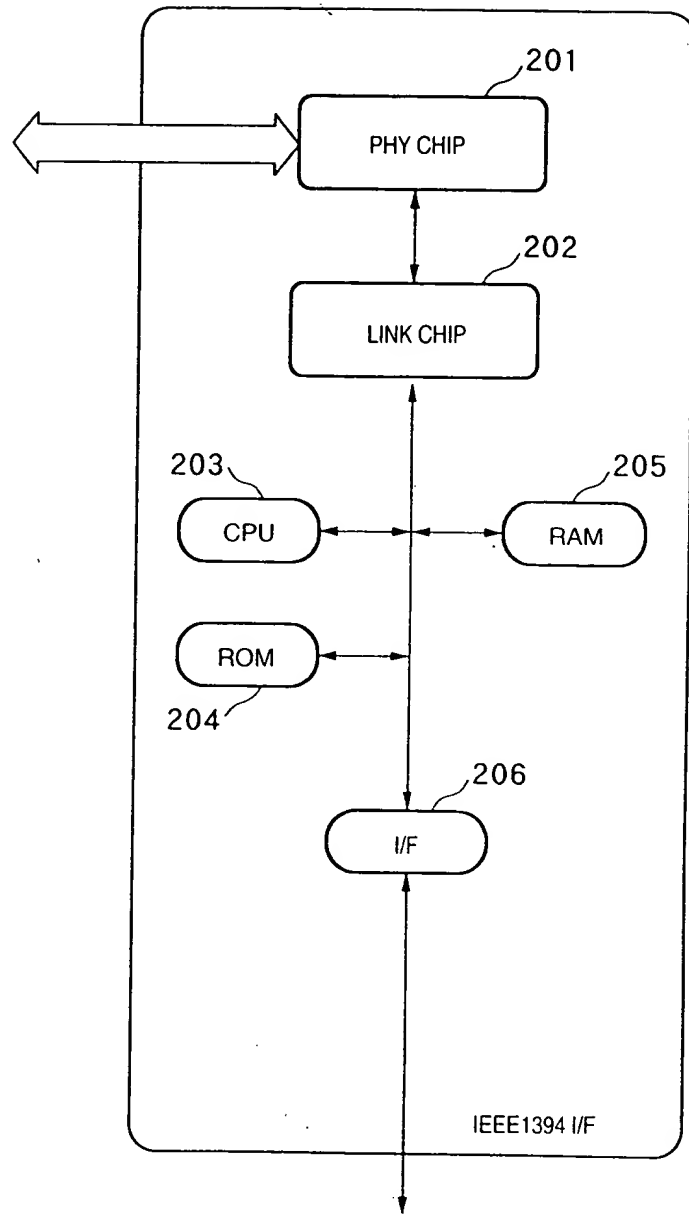


FIG. 1



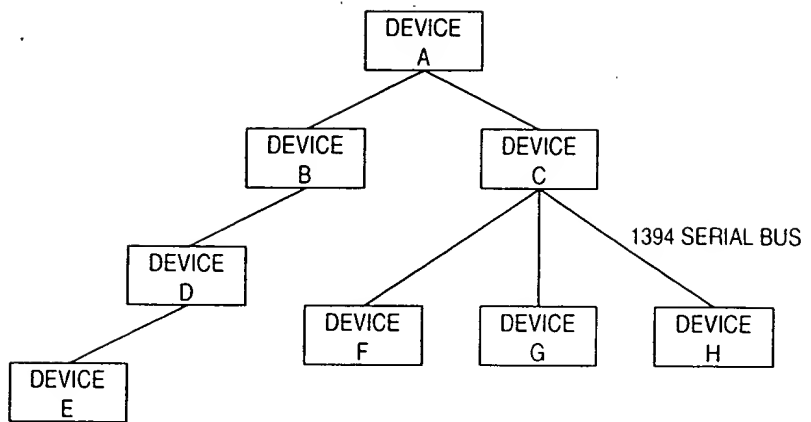
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FIG. 2



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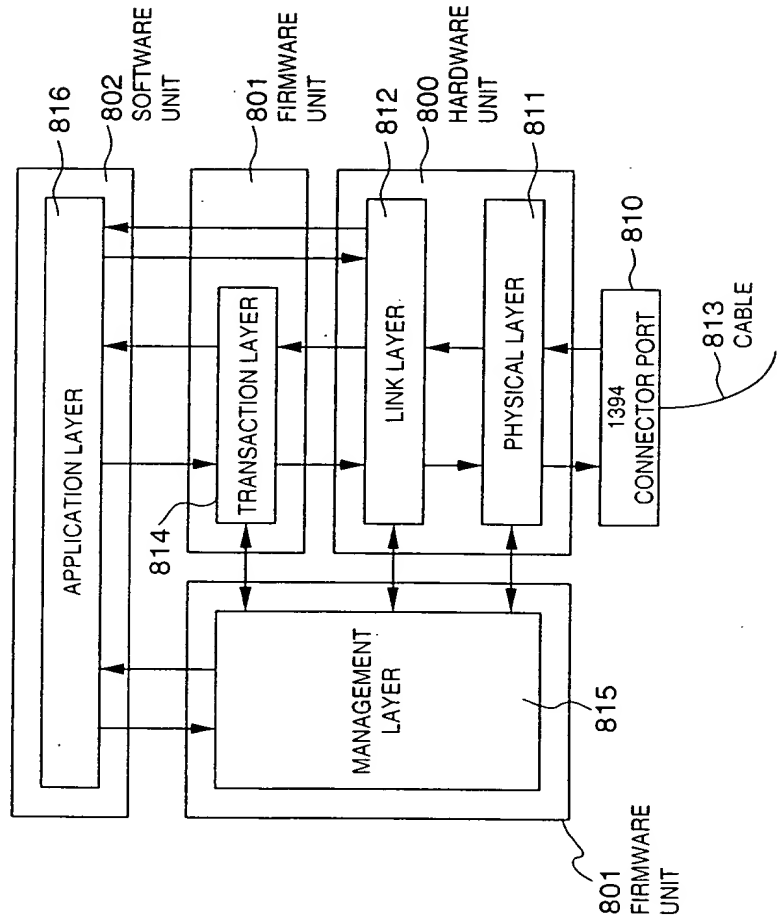
FIG. 3



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DATE 80" 66605960

FIG. 4



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FIG. 5

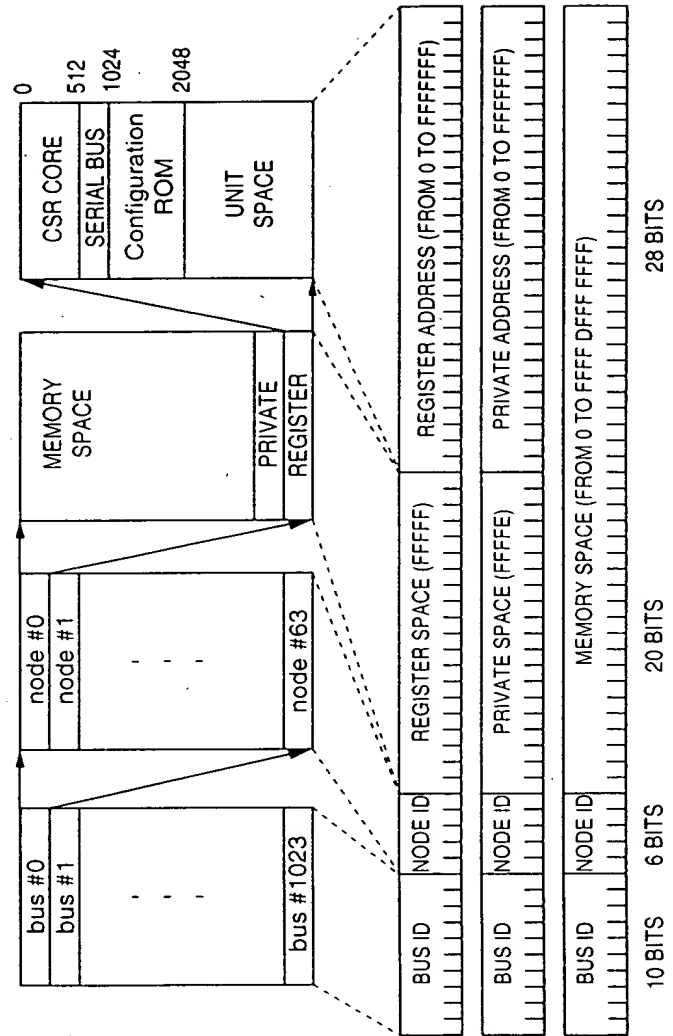
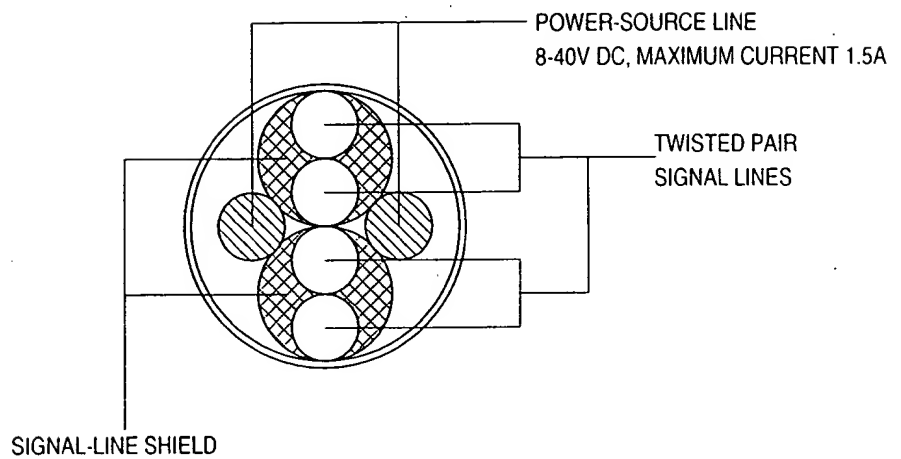


FIG. 6

CROSS-SECTION OF CABLE



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FIG. 7

CLOCK : EXCLUSIVE-OR SIGNAL BETWEEN Data AND Strobe

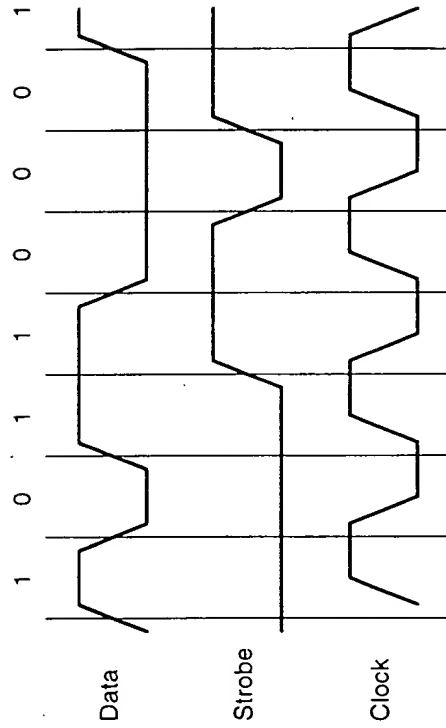
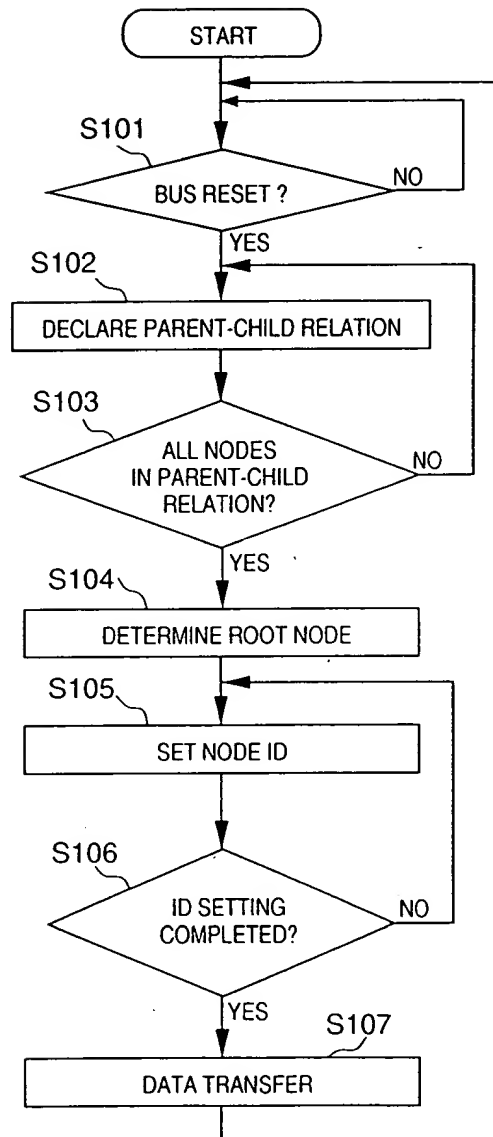


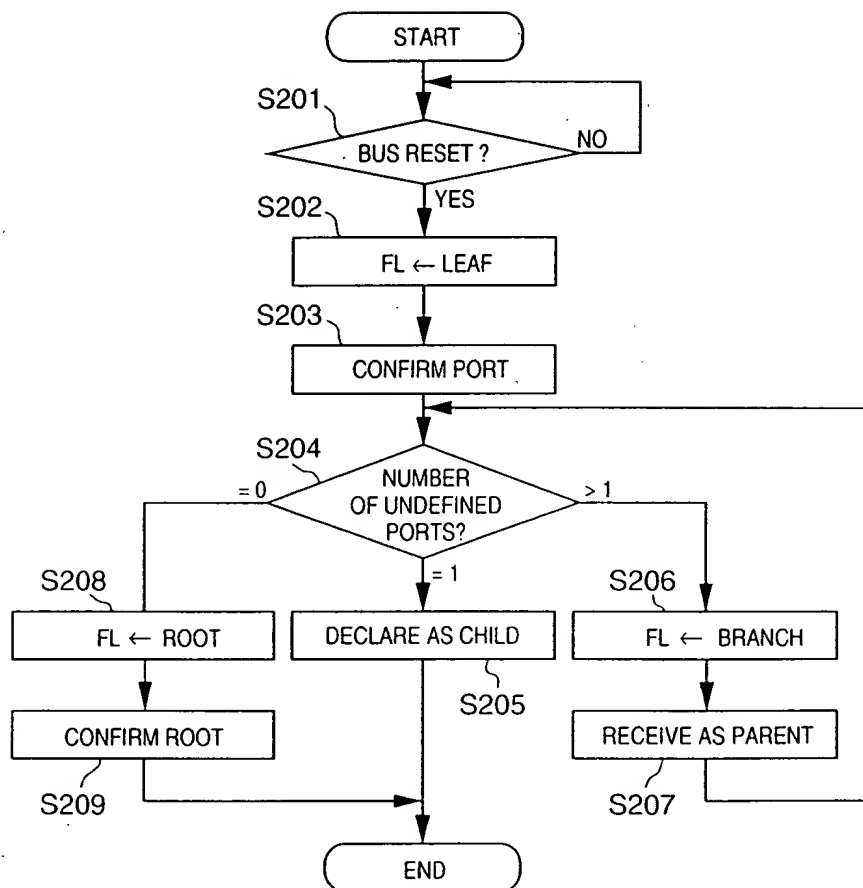
FIG. 8



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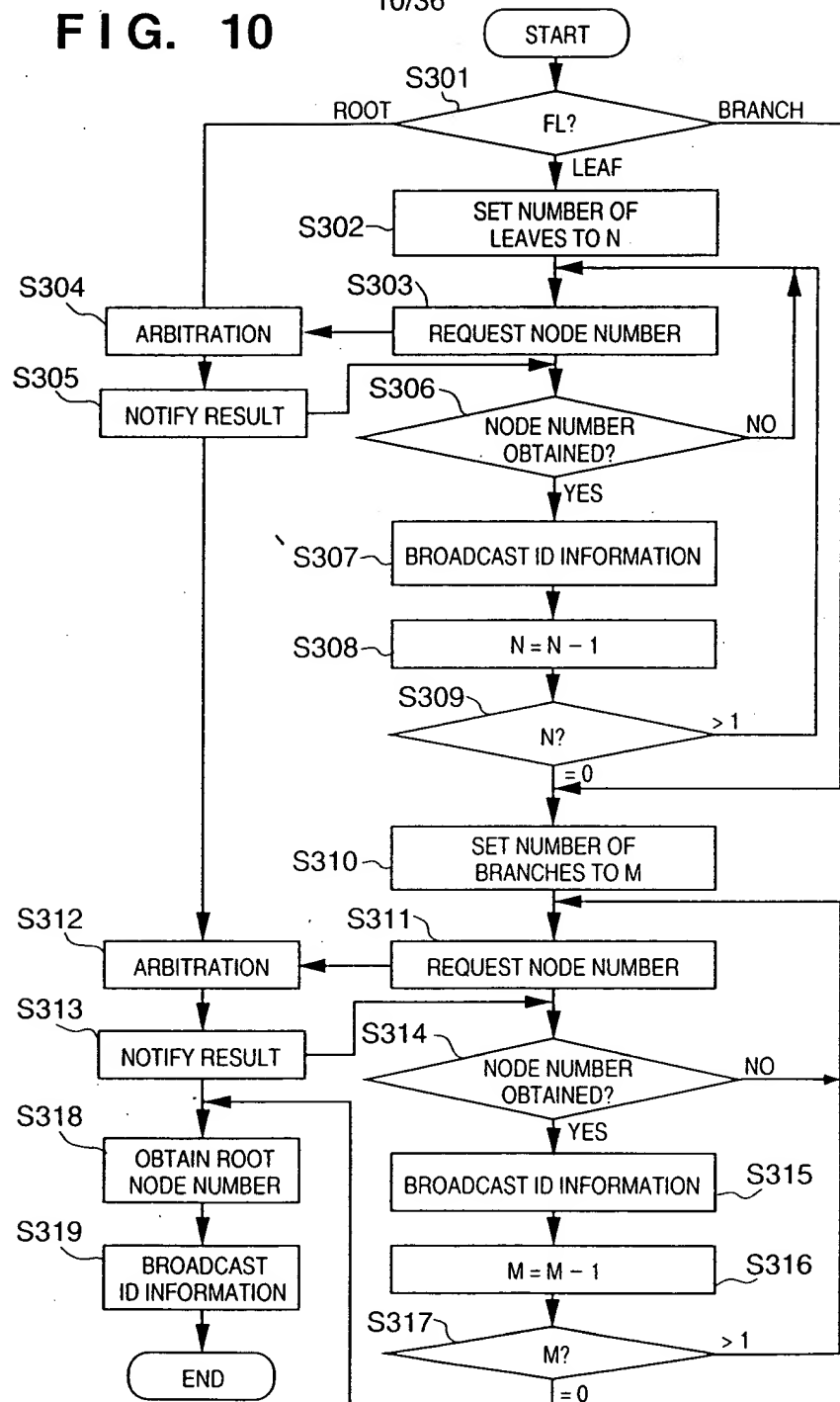
FIG. 9



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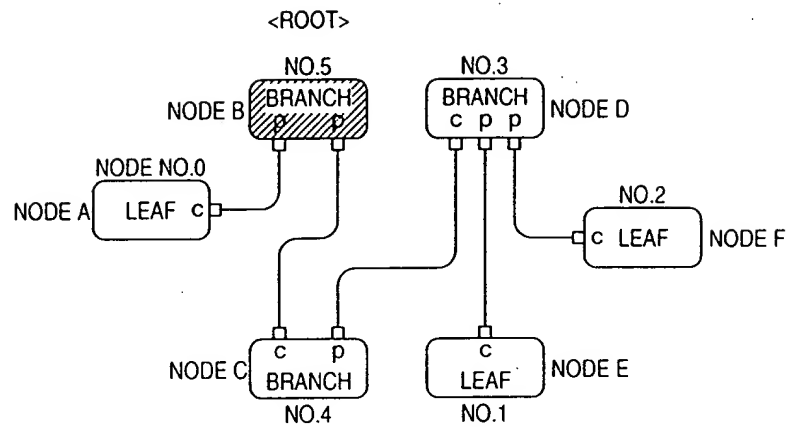
FIG. 10

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FIG. 11



BRANCH : NODE WITH TWO OR MORE NODE CONNECTIONS

LEAF : NODE WITH SINGLE PORT CONNECTION

□ : PORT

c : PORT CORRESPONDING TO CHILD NODE

p : PORT CORRESPONDING TO PARENT NODE

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FIG. 12
CSR CORE REGISTER

OFFSET (hexadecimal)	REGISTER NAME	FUNCTION
000	STATE_CLEAR	INFORMATION ON STATUS AND CONTROL
004	STATE_SET	INFORMATION ON WRITE ENABLE/DISABLE STATUS OF STATE_CLEAR
008	NODE_IDS	BUS ID + NODE ID
00C	RESET_START	TO RESET BUS BY WRITING INTO THIS AREA
010-014	INDIRECT_ADDRESS, INDIRECT_DATA	REGISTER TO ACCESS ROM AREA GREATER THAN 1KB
018-01C	SPLIT_TIMEOUT	TIMER VALUE TO DETECT TIME-OUT OF SPLIT TRANSACTION
020-02C	ARGUMENT, TEST_START, TEST_STATUS	REGISTER FOR DIAGNOSIS
030-04C	UNITS_BASE, UNITS_BOUND, MEMORY_BASE, MEMORY_BOUND	NOT INSTALLED IN IEEE 1394
050-054	INTERRUPT_TARGET, INTERRUPT_MASK	REGISTER OF INTERRUPTION NOTIFICATION
058-07C	CLOCK_VALUE, CLOCK_TICK_PERIOD, CLOCK_STORBE_ARRIVED, CLOCK_INFO	NOT INSTALLED IN IEEE 1394
080-0FC	MESSAGE_REQUEST, MESSAGE_RESPONSE	REGISTER FOR MESSAGE NOTIFICATION
100-17C		RESERVATION
180-1FC	ERROR_LOG_BUFFER	TO RESERVE FOR IEEE 1394

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FIG. 13
SERIAL BUS REGISTER

OFFSET (hexadecimal)	REGISTER NAME	FUNCTION
200	CYCLE_TIME	COUNTER FOR ISOCHRONOUS TRANSFER
204	BUS_TIME	REGISTER FOR TIME SYNCHRONIZATION
208	POWER_FAIL_IMMINENT	REGISTER RELATING TO POWER SUPPLY
20C	POWER_SOURCE	
210	BUSY_TIMEOUT	TO CONTROL RETRY IN TRANSACTION LAYER
214~218		RESERVATION
21C	BUS_MANAGER_ID	NODE ID OF BUS MANAGER
220	BANDWIDTH_AVAILABLE	TO MANAGE ISOCHRONOUS TRANSFER BAND
224~228	CHANNELS_AVAILABLE	TO MANAGE CHANNEL NUMBER FOR ISOCHRONOUS TRANSFER
22C	MAINT_CONTROL	REGISTER FOR DIAGNOSIS
230	MAINT_UTILITY	
234~3FC		RESERVATION

NOTE: 66605960

FIG. 14
SERIAL-BUS NODE RESOURCE REGISTER

OFFSET (hexadecimal)	REGISTER NAME	FUNCTION
800~FFC		RESERVATION
1000~13FC	TOPOLOGY-MAP	INFORMATION ON SERIAL BUS STRUCTURE
1400~1FFC		RESERVATION
2000~2FFC	SPEED-MAP	INFORMATION ON TRANSFER SPEED OF SERIAL BUS
3000~FFFC		RESERVATION

FIG. 15
MINIMUM FORMAT CONFIGURATION ROM

01	VENDOR ID
----	-----------

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FIG. 16

GENERAL FORMAT CONFIGURATION ROM

LENGTH OF bus_info_block	LENGTH OF ROM	CRC
bus_info_block (ASCII CODE OF 1394 BUS AND INFORMATION ON WHETHER OR NOT NODE HAS CAPABILITIES OF ISOSYNCHRONOUS RESOURCE MANAGEMENT, CYCLE MASTER, AND BUS MANAGEMENT)		
root_directory (INDICATE VENDOR ID AND NODE FUNCTION)		
unit_directories (INDICATE UNIT TYPE AND DRIVER SOFT VERSION)		
root & unit_leaves		
vendor_dependent_information		

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FIG. 17

REQUESTS FOR BUS ACCESS

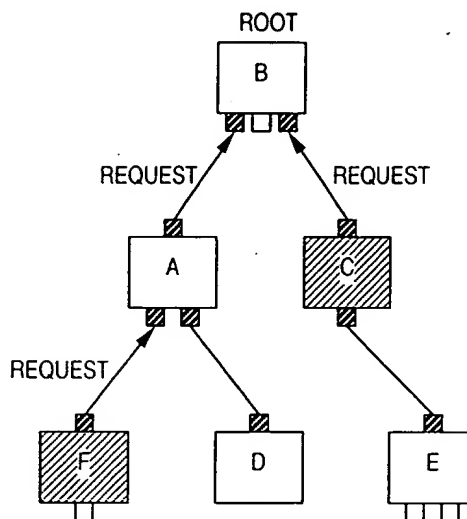
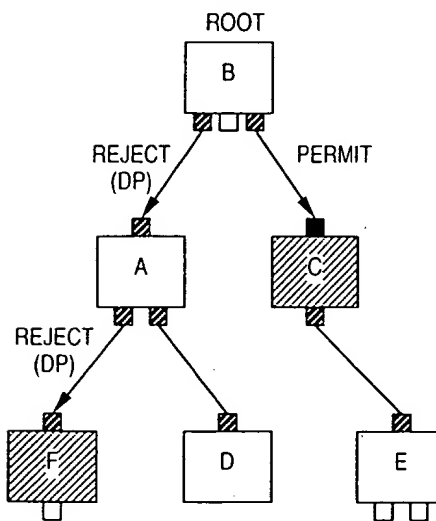


FIG. 18

BUS ACCESS GRANTED

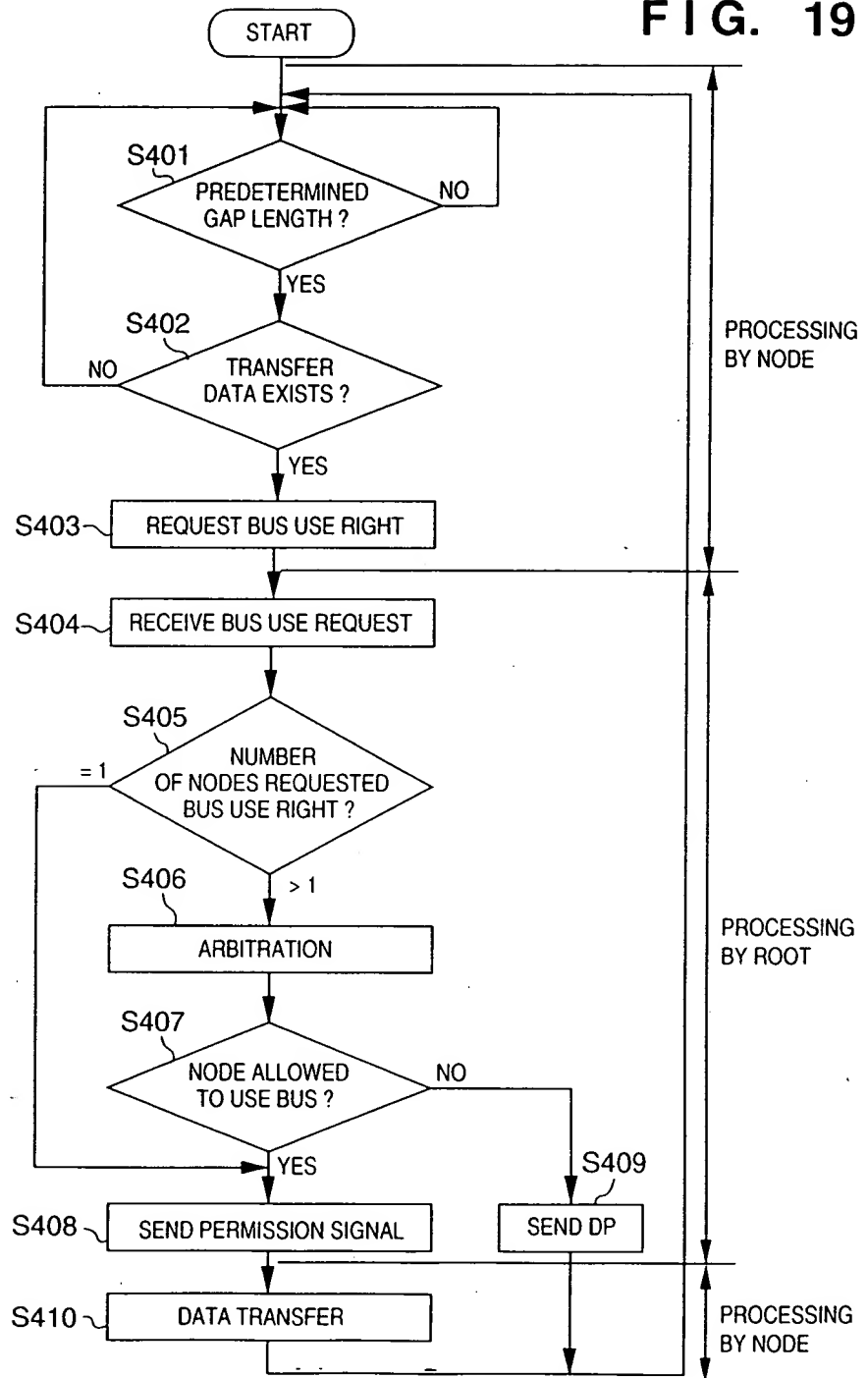


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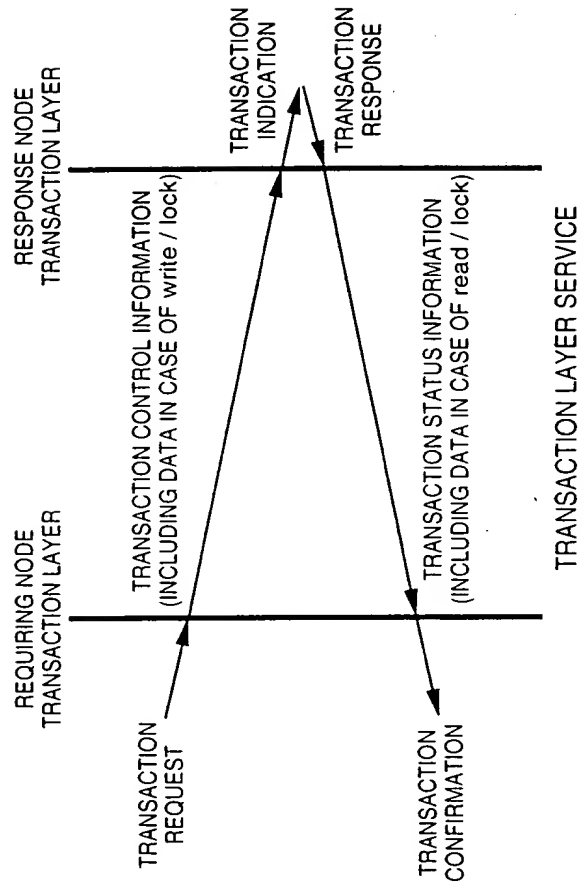
FIG. 19

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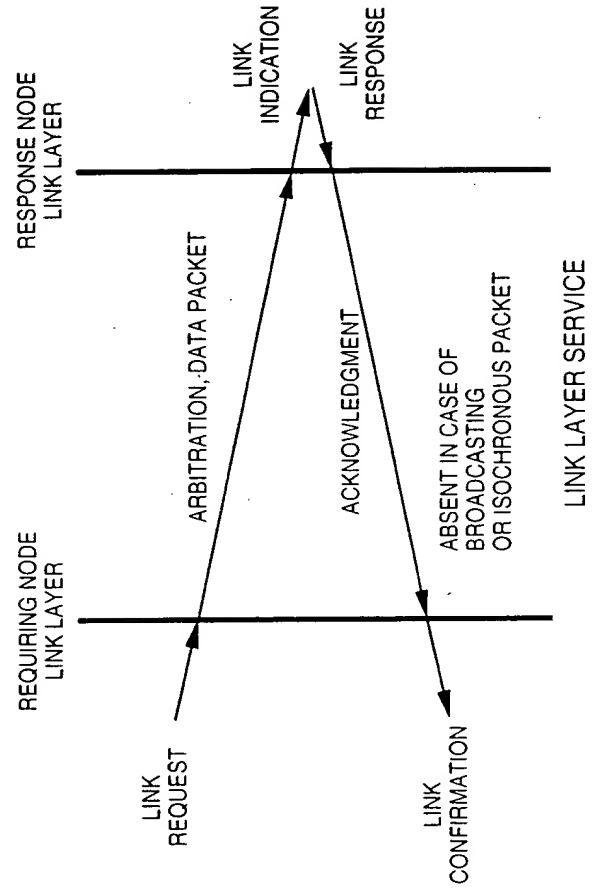
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FIG. 20



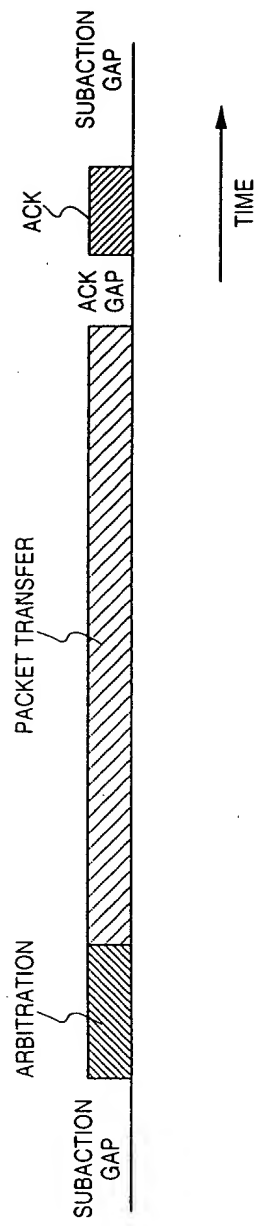
NOTE: 66605960

FIG. 21



NOTE: 66605960

FIG. 22



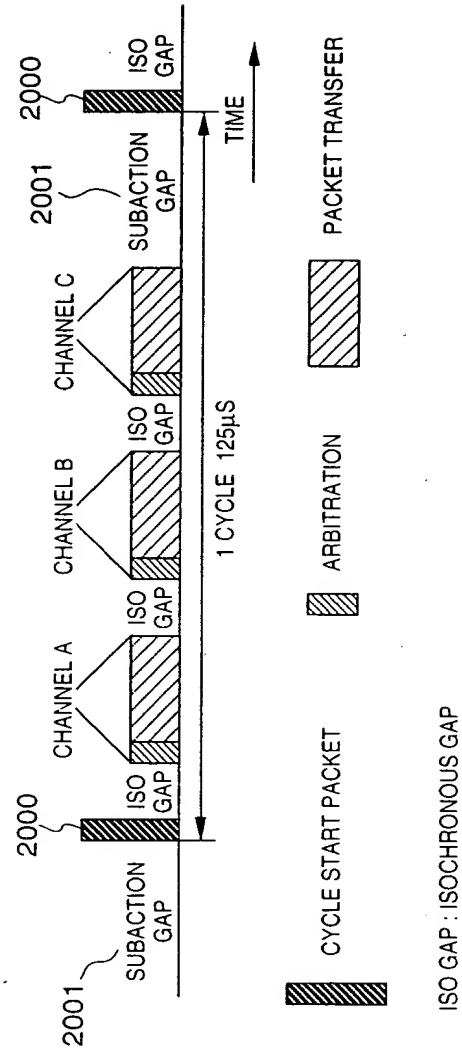
NOTE: 66605960

FIG. 23

destination_ID	t0	rt	tcode	pri
source_ID		destination_offset		
data_length	extended_tcode			
header_CRC				
data_field				
pad_field				
data_CRC				

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FIG. 24



NOTE: 66605960

FIG. 25

ISOCHRONOUS DATA PACKET

data_length	tag	channel	tcode	sy
header_CRC				
data_field				
pad_field				
data_CRC				

FIG. 26

ABBREVIATION	NAME	CONTENT
destination_ID	destination identifier	ID OF DESTINATION NODE (ASYNCHRONOUS ONLY)
tQ	transaction label	LABEL INDICATING A SERIES OF TRANSACTIONS (ASYNCHRONOUS ONLY)
rt	retry code	CODE INDICATING RETRANSMISSION STATUS (ASYNCHRONOUS ONLY)
tcode	transaction code	CODE INDICATING PACKET TYPE (ASYNCHRONOUS ONLY)
pri	priority	PRIORITY ORDER (ASYNCHRONOUS ONLY)
source_ID	source identifier	SOURCE NODE (ASYNCHRONOUS ONLY)
destination_offset	destination memory address	MEMORY ADDRESS OF DESTINATION NODE (ASYNCHRONOUS ONLY)
rcode	response code	RESPONSE STATUS (ASYNCHRONOUS ONLY)
quadiet_data	quadiet (4bytes) data	4-BYTE LENGTH DATA (ASYNCHRONOUS ONLY)
data_length	length of data	LENGTH OF data_field (EXCEPT pad bytes)
extended_tcode	extended transaction code	EXTENDED TRANSACTION CODE (ASYNCHRONOUS ONLY)
chanel	isochronous identifier	IDENTIFICATION OF ISOCHRONOUS PACKET
sy	synchronization code	SYNCHRONIZATION OF VIDEO IMAGE AND AUDIO INFORMATION
cycle_time_data	contents of the CYCLE_TIME register	CYCLE TIMER REGISTER VALUE OF CYCLE MASTER NODE (CYCLE PACKET ONLY)
data_field	data + pad bytes	DATA STORAGE (ISOCHRONOUS AND ASYNCHRONOUS)
header_CRC	CRC for header field	CRC FOR HEADER
data_CRC	CRC for data field	CRC FOR DATA
tag	tag label	ISOCHRONOUS PACKET FORMAT

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FIG. 27

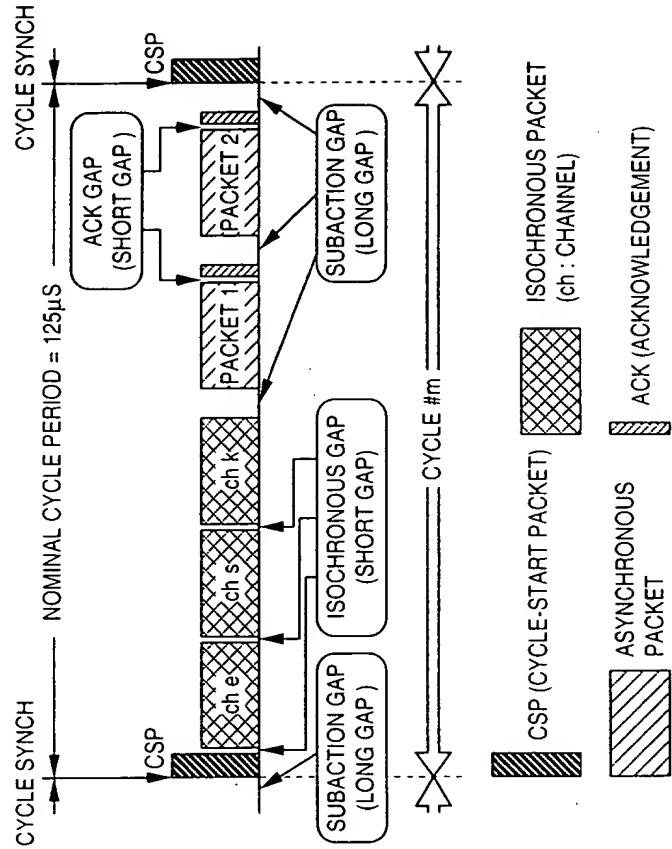
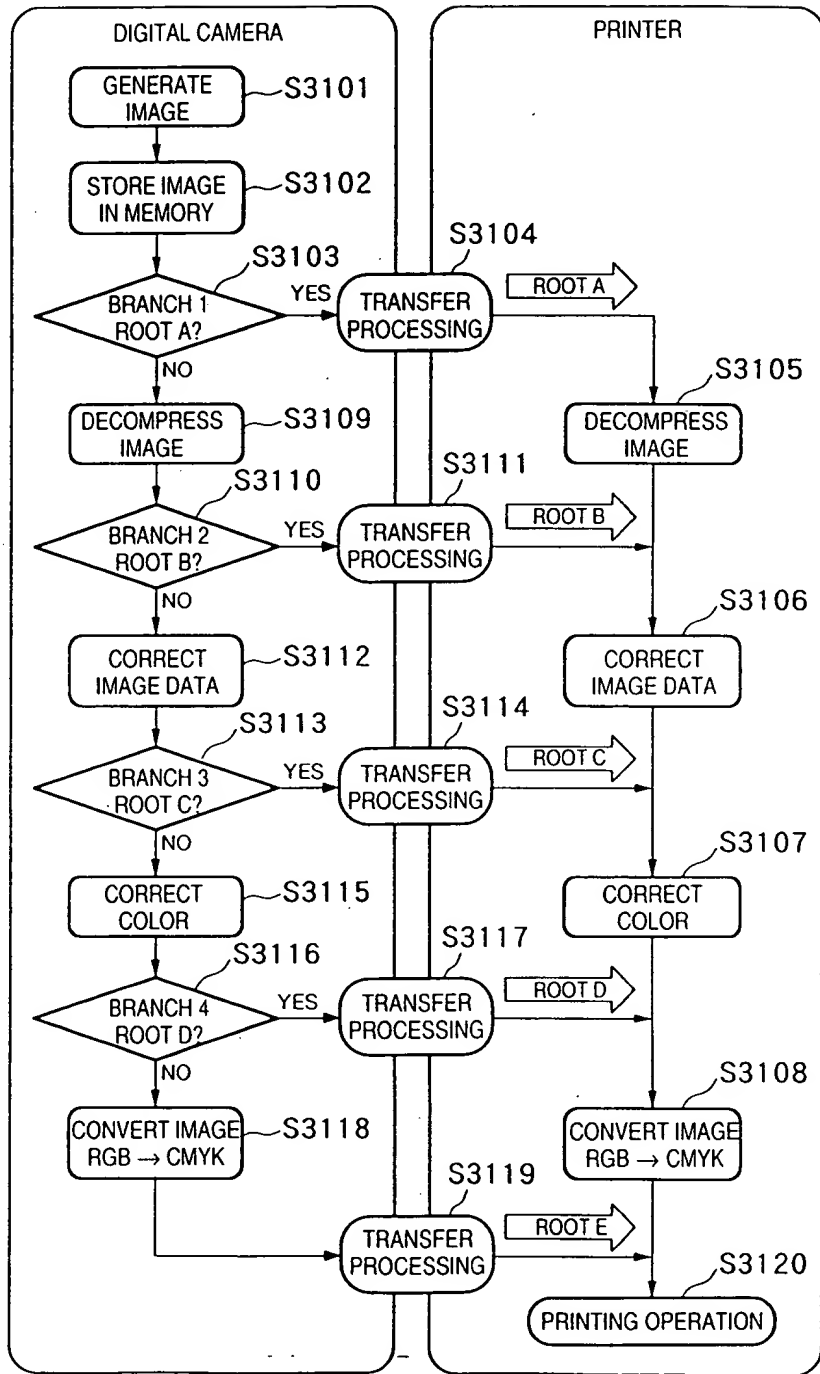


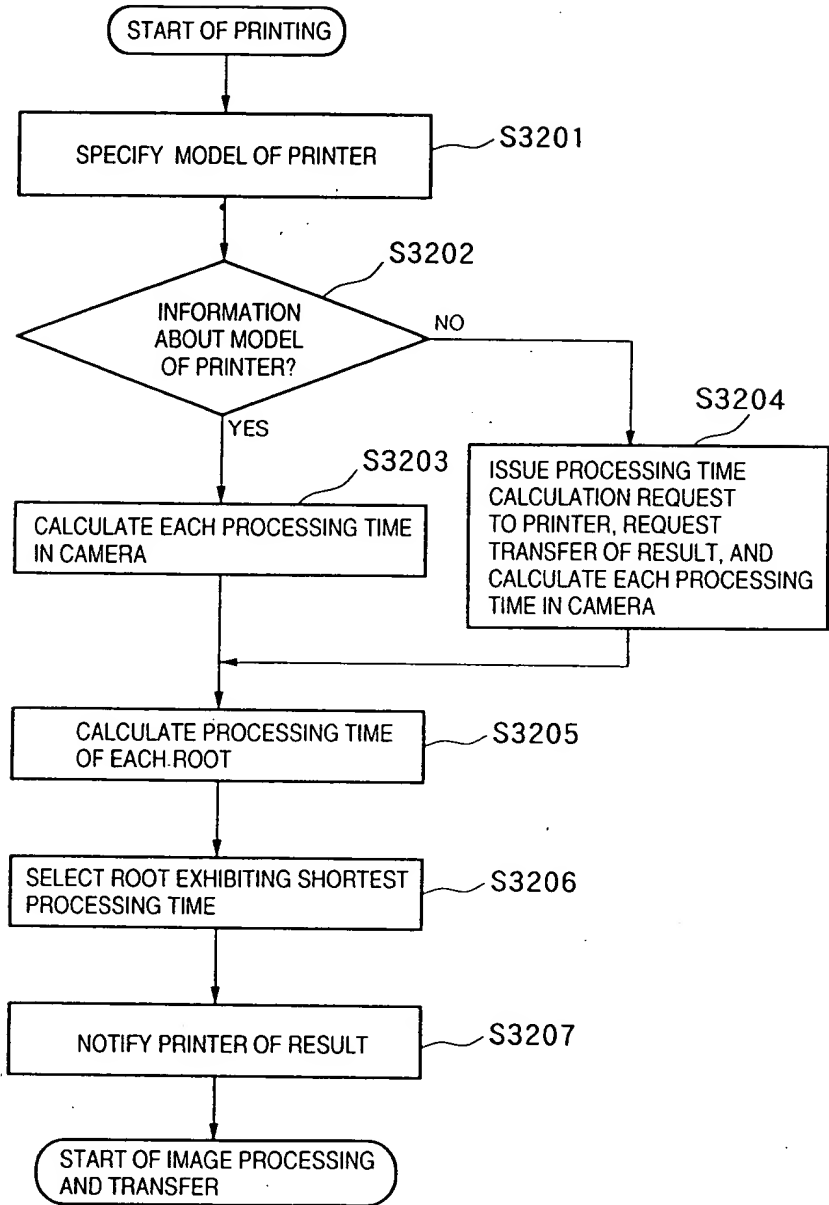
FIG. 28



00180" 66609960

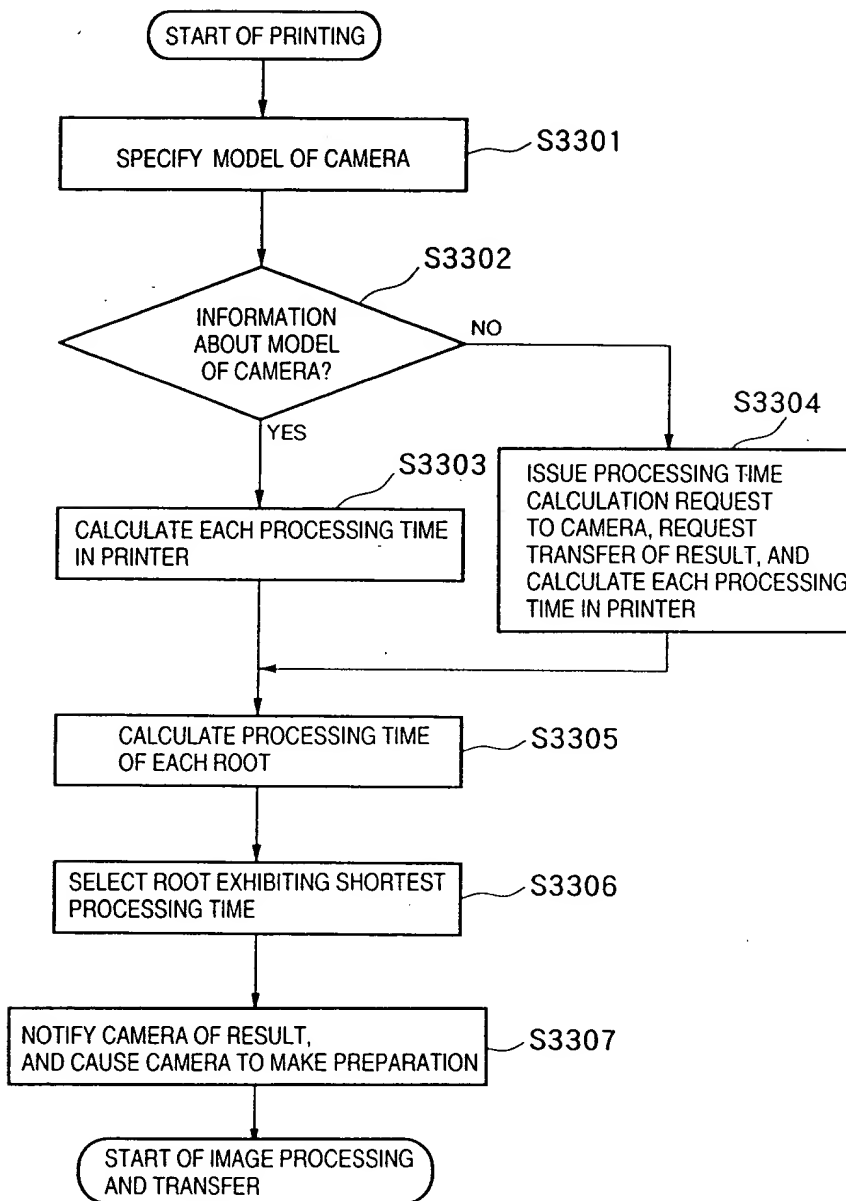
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FIG. 29



00FEB01 06605960

FIG. 30



007E80" 66605960

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FIG. 31

001E80*66605960

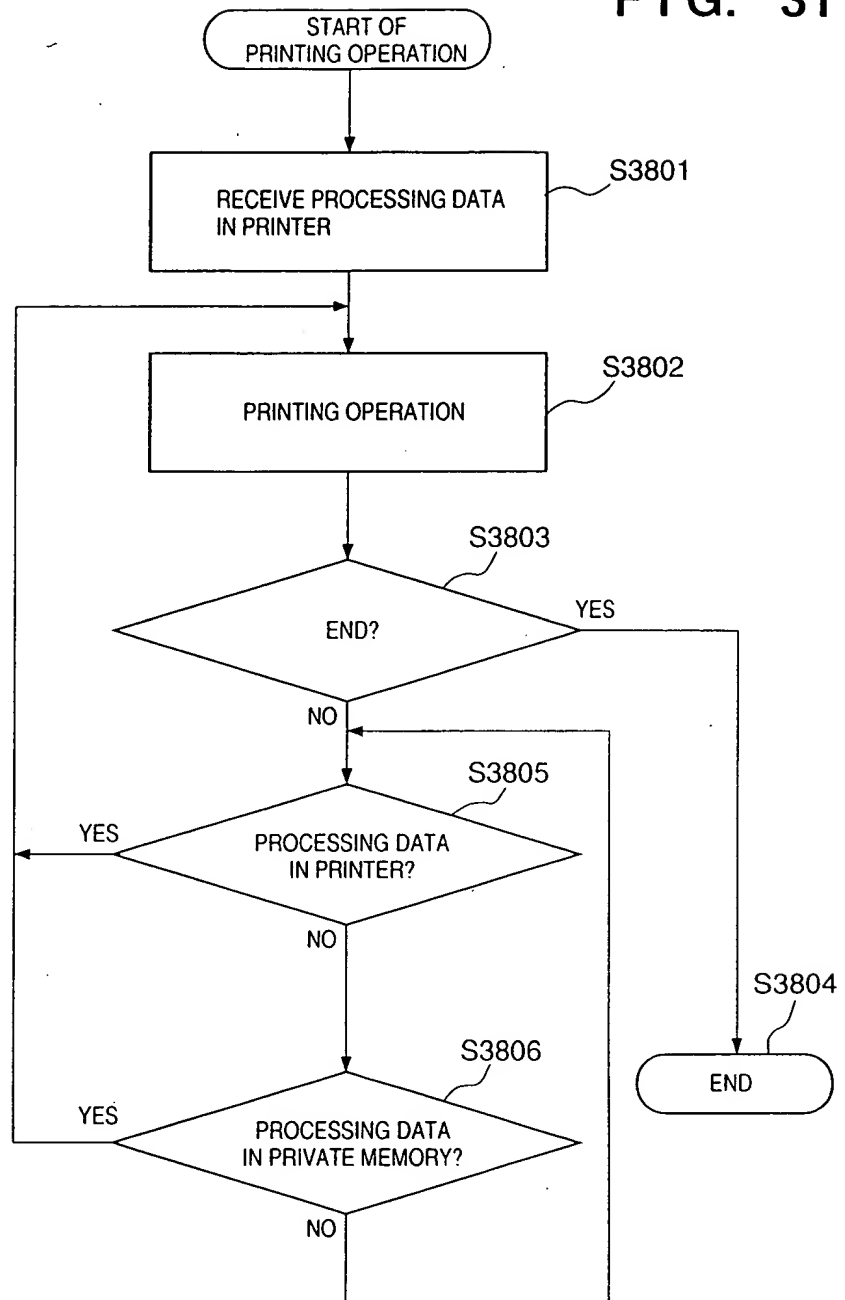
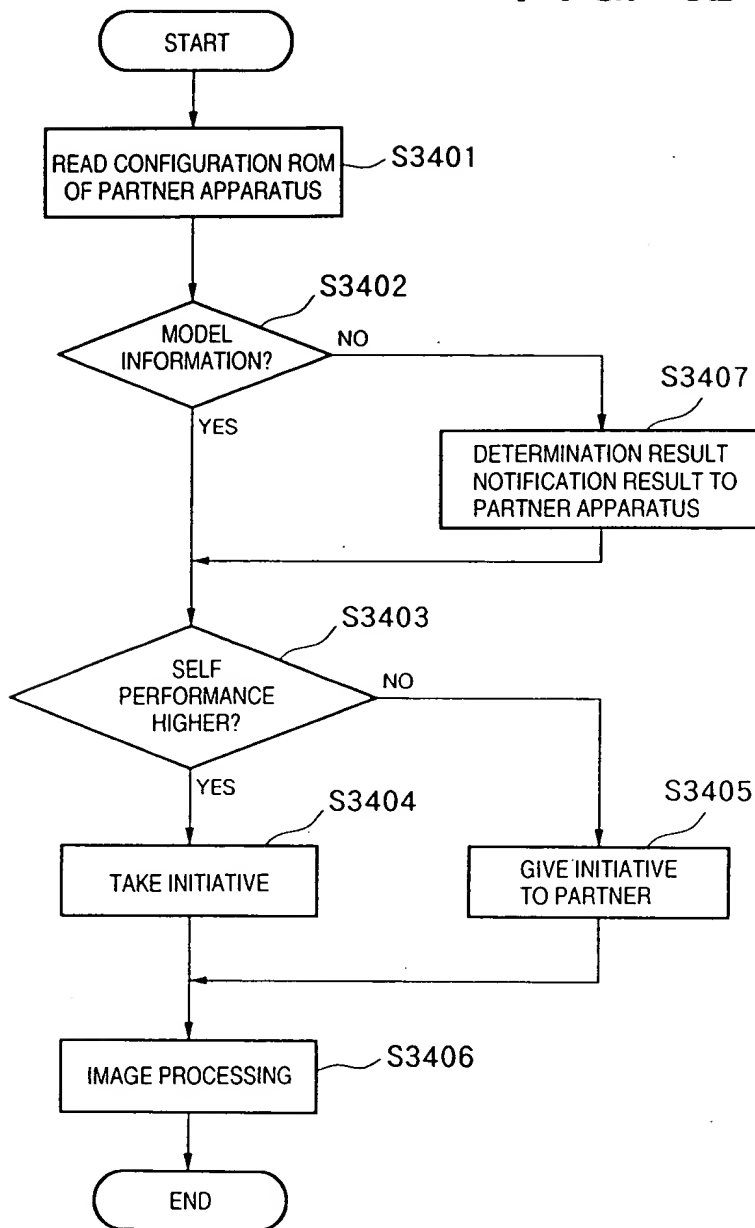
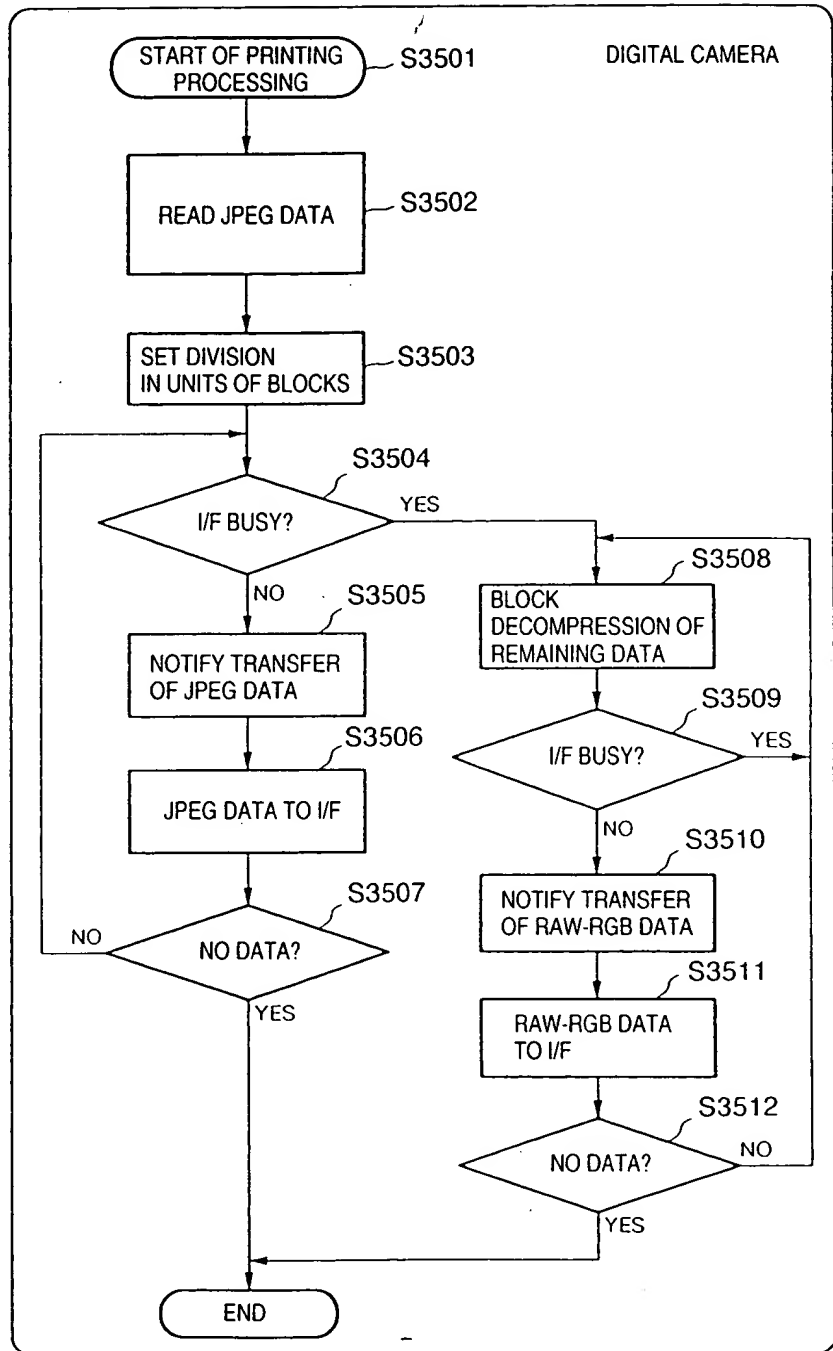


FIG. 32



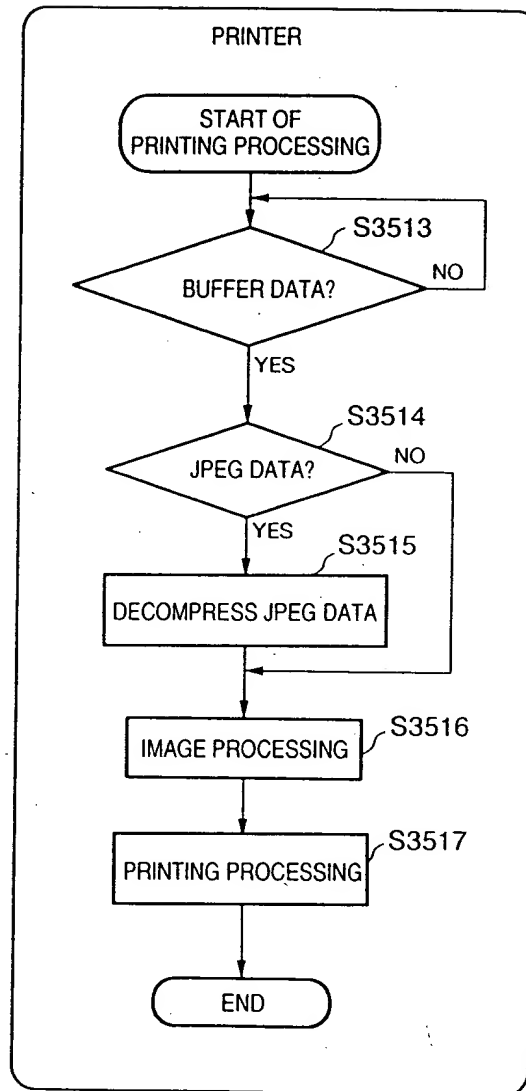
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FIG. 33A



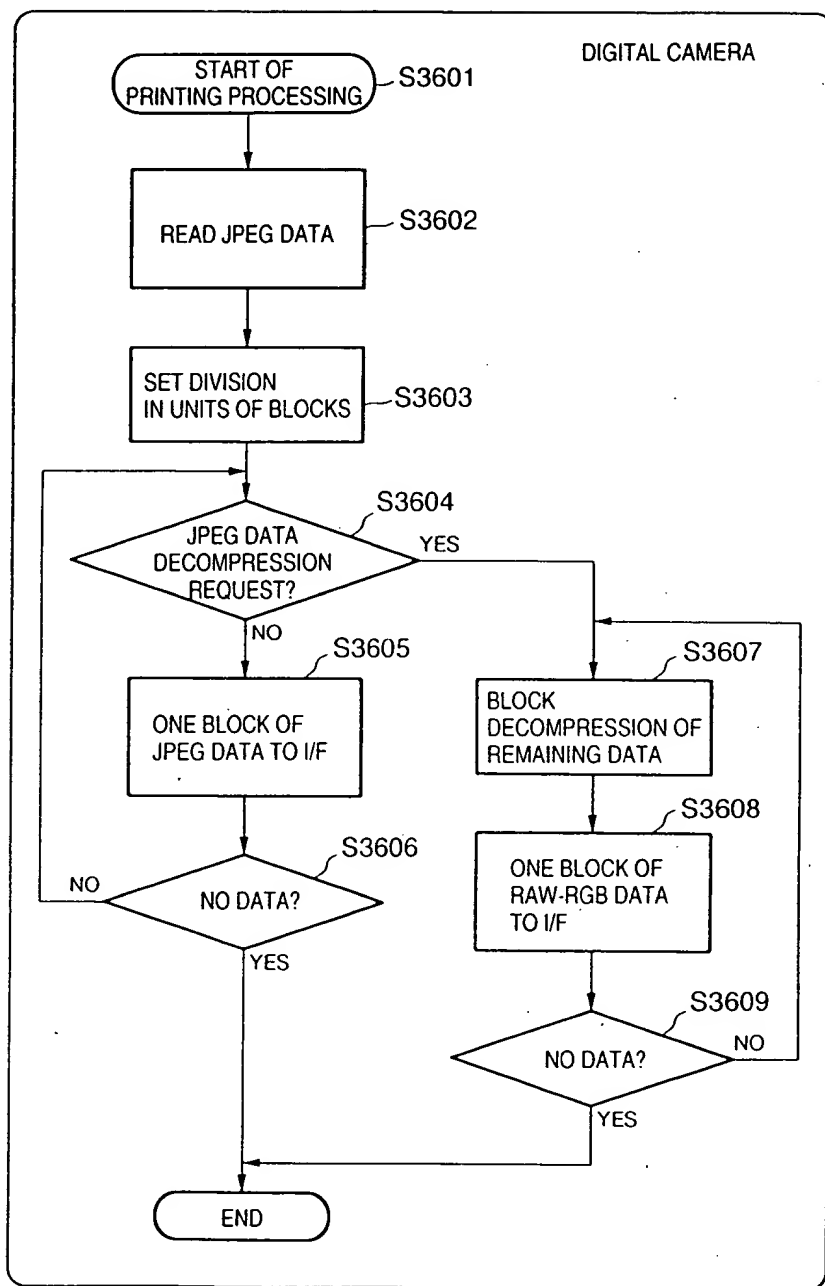
001E80"66605960

FIG. 33B



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FIG. 34A



001E80"66605960

001E80"66605960

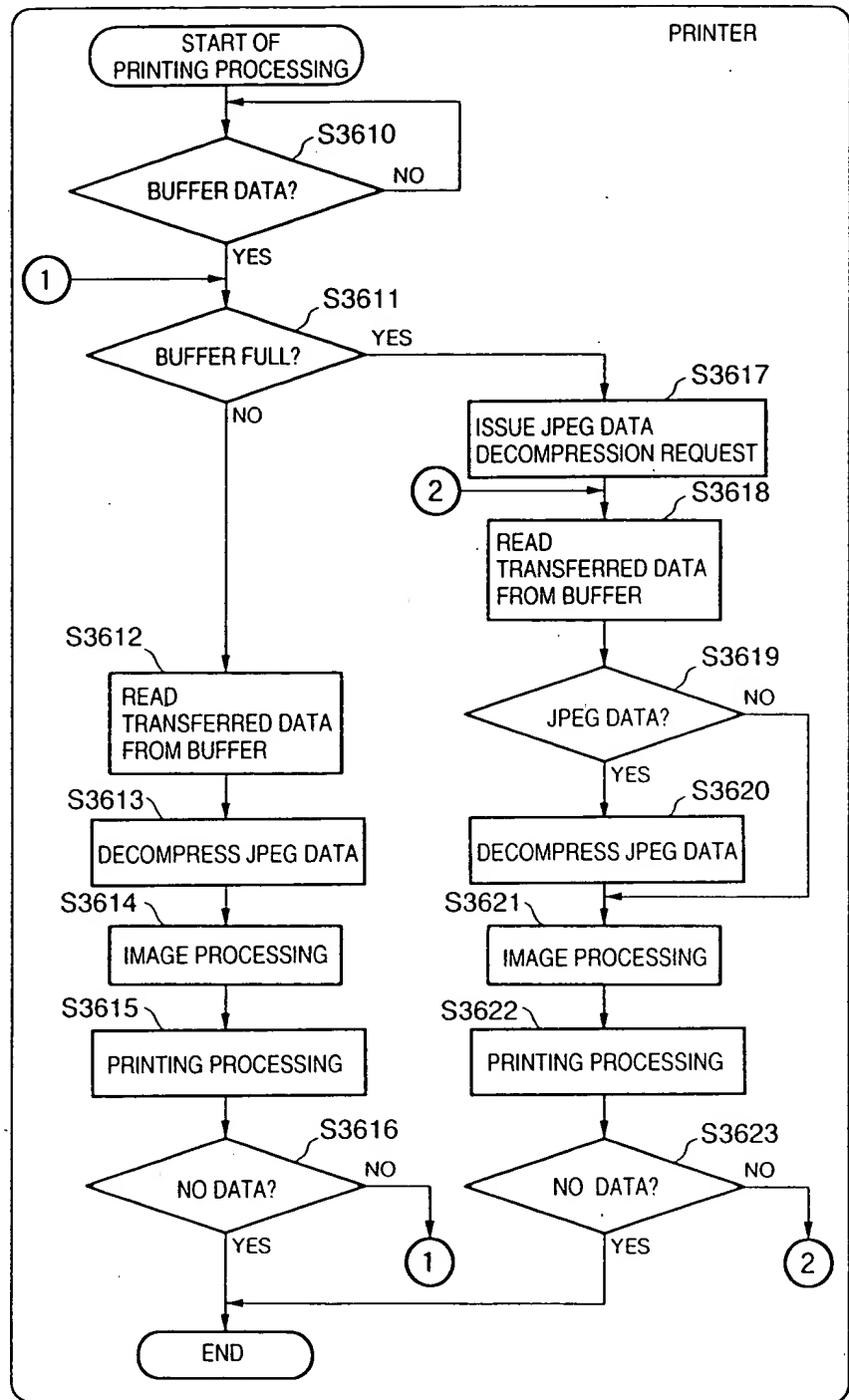
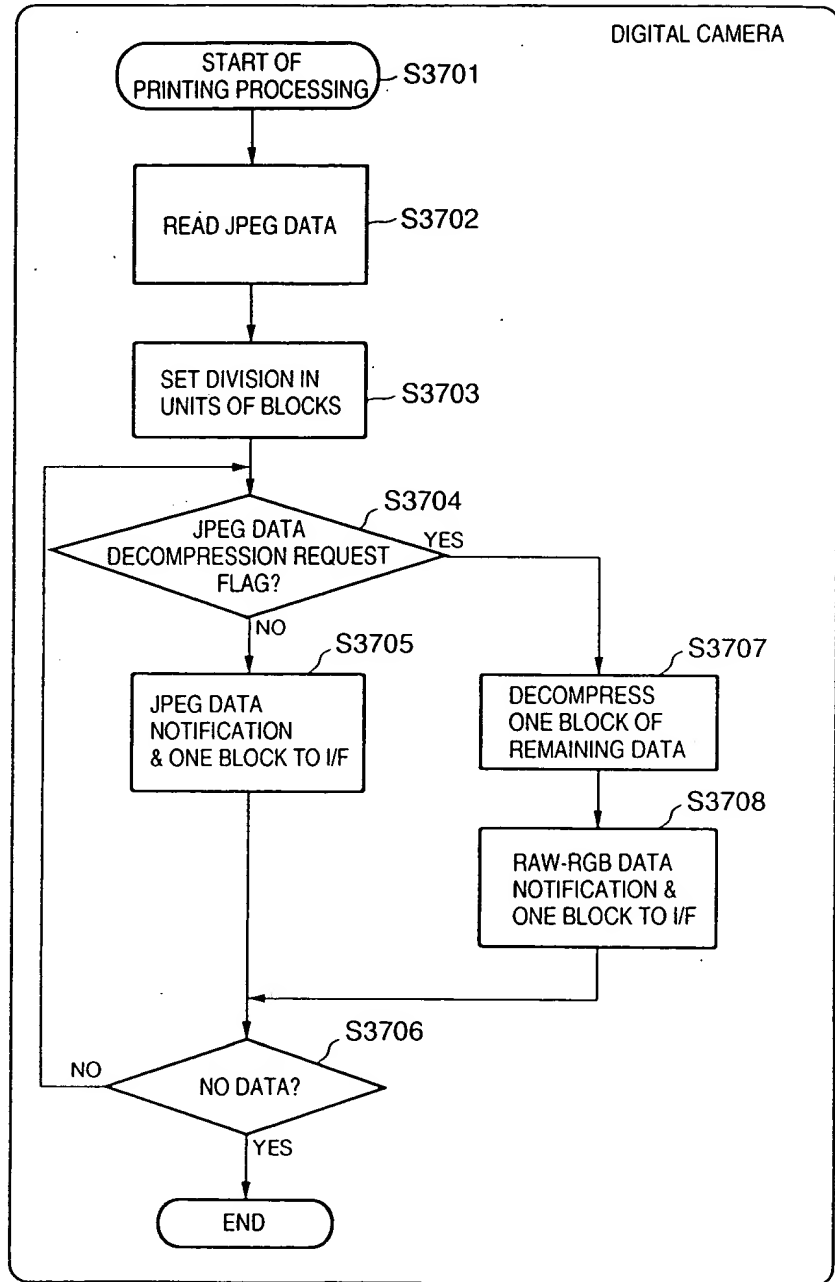


FIG. 35A



001E80'66605960

00650999-083400

